

Refine Search

10/677,008

Search Results -

Terms	Documents
(PCMO near2 layers) and ((etch or etching) near5 PCMO)	2

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L4

Refine Search

Recall Text

Clear

Interrupt

Search History

DATE: Monday, March 21, 2005 [Printable Copy](#) [Create Case](#)

Set Name Query
side by side

Hit Count Set Name
result set

DB=USPT; PLUR=YES; OP=ADJ

L4 (PCMO near2 layers) and ((etch or etching) near5 PCMO)
L3 (PCMO near2 stack)
L2 (PCMO near2 stack) and (etch or etching)
L1 (PCMO near2 stack) and ((etch or etching) near5 PCMO)

2 L4
 0 L3
 0 L2
 0 L1

END OF SEARCH HISTORY

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 6774004 B1

L4: Entry 1 of 2

File: USPT

Aug 10, 2004

US-PAT-NO: 6774004

DOCUMENT-IDENTIFIER: US 6774004 B1

TITLE: Nano-scale resistance cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 2. Document ID: US 6746910 B2

L4: Entry 2 of 2

File: USPT

Jun 8, 2004

US-PAT-NO: 6746910

DOCUMENT-IDENTIFIER: US 6746910 B2

TITLE: Method of fabricating self-aligned cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
-------	---------------------	-------	----------	-----------	---------------

Terms	Documents
(PCMO near2 layers) and ((etch or etching) near5 PCMO)	2

Display Format: TI

Change Format

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

Generate Collection

Print

L5: Entry 1 of 2

File: USPT

Aug 10, 2004

DOCUMENT-IDENTIFIER: US 6774004 B1

TITLE: Nano-scale resistance cross-point memory array

Detailed Description Text (12):

The first embodiment of the method of the invention uses TiN as a hard mask during etching of the memory resistor, such as PCMO. The other materials, such as SiN, TaN, WN, etc., may also be used as hard mask.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

End of Result Set



Generate Collection

Print

L5: Entry 2 of 2

File: USPT

Jun 8, 2004

DOCUMENT-IDENTIFIER: US 6746910 B2

TITLE: Method of fabricating self-aligned cross-point memory array

Brief Summary Text (10):

A method of fabricating a self-aligned cross-point memory array includes preparing a substrate, including forming any supporting electronic structures; forming a swell area on the substrate; implanting ions to form a deep N.sup.+ region; implanting ions to form a shallow P+ region on the N.sup.+ region to form a P+/N junction; depositing a barrier metal layer on the P+ region; depositing a bottom electrode layer on the barrier metal layer; depositing a sacrificial layer of polysilicon or silicon nitride on the bottom electrode layer; patterning and etching the structure to remove portions of the polysilicon layer, the bottom electrode layer, the barrier metal layer, the P+ region and the N.sup.+ region to form a trench; depositing oxide to fill the trench; patterning and etching the polysilicon; depositing a PCMO layer which is self-aligned with the remaining bottom electrode layer; depositing a top electrode layer; patterning and etching the top electrode layer; and completing the memory array structure.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 6774004 B1

L5: Entry 1 of 2

File: USPT

Aug 10, 2004

US-PAT-NO: 6774004

DOCUMENT-IDENTIFIER: US 6774004 B1

TITLE: Nano-scale resistance cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	--------

☐ 2. Document ID: US 6746910 B2

L5: Entry 2 of 2

File: USPT

Jun 8, 2004

US-PAT-NO: 6746910

DOCUMENT-IDENTIFIER: US 6746910 B2

TITLE: Method of fabricating self-aligned cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	--------

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
-------	---------------------	-------	----------	-----------	---------------

Terms	Documents
PCMO near3 (etching or etch)	2

Display Format: TI

Change Format

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

Refine Search

Search Results -

Terms	Documents
PCMO near3 (etching or etch)	2

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L5

Search History

DATE: Monday, March 21, 2005 [Printable Copy](#) [Create Case](#)

Set Name Query
side by side

Hit Count Set Name
result set

DB=USPT; PLUR=YES; OP=ADJ

<u>L5</u>	PCMO near3 (etching or etch)	2	<u>L5</u>
<u>L4</u>	(PCMO near2 layers) and ((etch or etching) near5 PCMO)	2	<u>L4</u>
<u>L3</u>	(PCMO near2 stack)	0	<u>L3</u>
<u>L2</u>	(PCMO near2 stack) and (etch or etching)	0	<u>L2</u>
<u>L1</u>	(PCMO near2 stack) and ((etch or etching) near5 PCMO)	0	<u>L1</u>

END OF SEARCH HISTORY

[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

End of Result Set



Generate Collection

Print

L7: Entry 1 of 1

File: USPT

Feb 17, 2004

DOCUMENT-IDENTIFIER: US 6693821 B2

TITLE: Low cross-talk electrically programmable resistance cross point memory

CLAIMS:

7. A memory structure comprising; a) a silicon substrate; b) a plurality of platinum bottom electrodes overlying the substrate; c) a plurality of platinum top electrodes overlying the bottom electrodes, wherein the top electrodes cross over the bottom electrodes forming a cross point at each cross over location; and d) a single layer of Pr.sub.0.7 Ca.sub.0.3 MnO.sub.3 (PCMO) interposed between the plurality of top electrodes and the plurality of bottom electrodes at each cross point.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

Refine Search

Search Results -

Terms	Documents
(top near2 electrode) and (bottom near2 electrode) and PCMO and (etch or etching)	12

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L9

Search History

DATE: Monday, March 21, 2005 [Printable Copy](#) [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<u>L9</u>	(top near2 electrode) and (bottom near2 electrode) and PCMO and (etch or etching)	12	<u>L9</u>
<u>L8</u>	l7 and etch	0	<u>L8</u>
<u>L7</u>	(plurality near4 PCMO)	1	<u>L7</u>
<u>L6</u>	(stacks or stack) near9 PCMO	0	<u>L6</u>
<u>L5</u>	PCMO near3 (etching or etch)	2	<u>L5</u>
<u>L4</u>	(PCMO near2 layers) and ((etch or etching) near5 PCMO)	2	<u>L4</u>
<u>L3</u>	(PCMO near2 stack)	0	<u>L3</u>
<u>L2</u>	(PCMO near2 stack) and (etch or etching)	0	<u>L2</u>
<u>L1</u>	(PCMO near2 stack) and ((etch or etching) near5 PCMO)	0	<u>L1</u>

END OF SEARCH HISTORY

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 10 of 12 returned.

☐ 1. Document ID: US 6859382 B2

L9: Entry 1 of 12

File: USPT

Feb 22, 2005

US-PAT-NO: 6859382

DOCUMENT-IDENTIFIER: US 6859382 B2

TITLE: Memory array of a non-volatile ram

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWD	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 2. Document ID: US 6858905 B2

L9: Entry 2 of 12

File: USPT

Feb 22, 2005

US-PAT-NO: 6858905

DOCUMENT-IDENTIFIER: US 6858905 B2

TITLE: Methods of manufacturing low cross-talk electrically programmable resistance cross point memory structures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWD	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 3. Document ID: US 6856536 B2

L9: Entry 3 of 12

File: USPT

Feb 15, 2005

US-PAT-NO: 6856536

DOCUMENT-IDENTIFIER: US 6856536 B2

TITLE: Non-volatile memory with a single transistor and resistive memory element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWD	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 4. Document ID: US 6841833 B2

L9: Entry 4 of 12

File: USPT

Jan 11, 2005

US-PAT-NO: 6841833

DOCUMENT-IDENTIFIER: US 6841833 B2

TITLE: 1T1R resistive memory

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 5. Document ID: US 6825058 B2

L9: Entry 5 of 12

File: USPT

Nov 30, 2004

US-PAT-NO: 6825058

DOCUMENT-IDENTIFIER: US 6825058 B2

TITLE: Methods of fabricating trench isolated cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 6. Document ID: US 6809753 B2

L9: Entry 6 of 12

File: USPT

Oct 26, 2004

US-PAT-NO: 6809753

DOCUMENT-IDENTIFIER: US 6809753 B2

TITLE: Optical microswitch printer heads

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 7. Document ID: US 6774054 B1

L9: Entry 7 of 12

File: USPT

Aug 10, 2004

US-PAT-NO: 6774054

DOCUMENT-IDENTIFIER: US 6774054 B1

TITLE: High temperature annealing of spin coated Pr1-xCaxMnO3 thim film for RRAM application

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 8. Document ID: US 6774004 B1

L9: Entry 8 of 12

File: USPT

Aug 10, 2004

US-PAT-NO: 6774004

DOCUMENT-IDENTIFIER: US 6774004 B1

TITLE: Nano-scale resistance cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 9. Document ID: US 6762481 B2

L9: Entry 9 of 12

File: USPT

Jul 13, 2004

US-PAT-NO: 6762481

DOCUMENT-IDENTIFIER: US 6762481 B2

TITLE: Electrically programmable nonvolatile variable capacitor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	DOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 10. Document ID: US 6746910 B2

L9: Entry 10 of 12

File: USPT

Jun 8, 2004

US-PAT-NO: 6746910

DOCUMENT-IDENTIFIER: US 6746910 B2

TITLE: Method of fabricating self-aligned cross-point memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	DOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Terms

(top near2 electrode) and (bottom near2 electrode) and PCMO and
(etch or etching)

Documents

12

Display Format: TI

Change Format

[Previous Page](#)[Next Page](#)[Go to Doc#](#)

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 11 through 12 of 12 returned.

☐ 11. Document ID: US 6583003 B1

L9: Entry 11 of 12

File: USPT

Jun 24, 2003

US-PAT-NO: 6583003

DOCUMENT-IDENTIFIER: US 6583003 B1

TITLE: Method of fabricating 1T1R resistive memory array

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

☐ 12. Document ID: US 6204139 B1

L9: Entry 12 of 12

File: USPT

Mar 20, 2001

US-PAT-NO: 6204139

DOCUMENT-IDENTIFIER: US 6204139 B1

TITLE: Method for switching the properties of perovskite materials used in thin film resistors

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	--------

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
-------	---------------------	-------	----------	-----------	---------------

Terms	Documents
(top near2 electrode) and (bottom near2 electrode) and PCMO and (etch or etching)	12

Display Format: TI

Change Format

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)